5.2 BIOLOGICAL RESOURCES

This section evaluates the potential for the Valle Verde Retirement Community project to result in significant impacts to biological resources. Project-related impacts to biological resources were also evaluated during the EIR scoping process for the proposed project (Appendix A). The scoping process determined that the project would have the potential to result in significant impacts to: oak woodlands; sensitive habitat areas including oak woodland and coastal sage scrub due to proposed fuel modification activities; and wildlife that may utilize the project site.

5.2.1 Biological Survey Methods

Watershed Environmental, Inc. performed field surveys of the Valle Verde project site on December 15, 2009, January 26, and February 25, 2010. Surveys consisted of walking through the areas where development and fuel management activities are proposed. Plant community/habitat types were mapped on a 1-inch equals 150 feet-scale field map depicting topography and that was overlaid on an April 2009 color aerial photograph.

Botanical surveys were performed following the California Native Plant Society's recommended survey guidelines (CNPS 2001) and the US Fish and Wildlife Service's *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants* (USFWS 2001). Wildlife surveys followed standard professional practices and the Santa Barbara County *Biological Survey Guidelines* (SBCO 1995; contained in Santa Barbara County's *Environmental Thresholds and Guidelines Manual*, updated 2002). Field surveys conducted for this EIR focused on determining the boundaries of existing native plant communities (i.e., coast live oak woodlands and coastal sage scrub) within the 59.75 acre Valle Verde property, and the assessment of impacts to those communities, special status plants and wildlife in those communities, and impacts to native trees.

Background biological information was obtained from Hunt and Associates *Revised Biological Assessment of Valle Verde Retirement Community Expansion Project Santa Barbara, California* dated December 18, 2008; Valle Verde Retirement Community Tree Assessment and Protection Plan dated November 12, 2008 (B. Spiewak); and an *Initial Study/Environmental Checklist for 900 Calle de los Amigos – Valle Verde Retirement Community* prepared by the City of Santa Barbara Community Development Department Planning Division (2009). Other sources of environmental planning information included the City of Santa Barbara *Final Program Environmental Impact Report Wildland Fire Plan*, dated February 2004; and the California Natural Diversity Data Base (CDFG 2010).

5.2.2 Setting

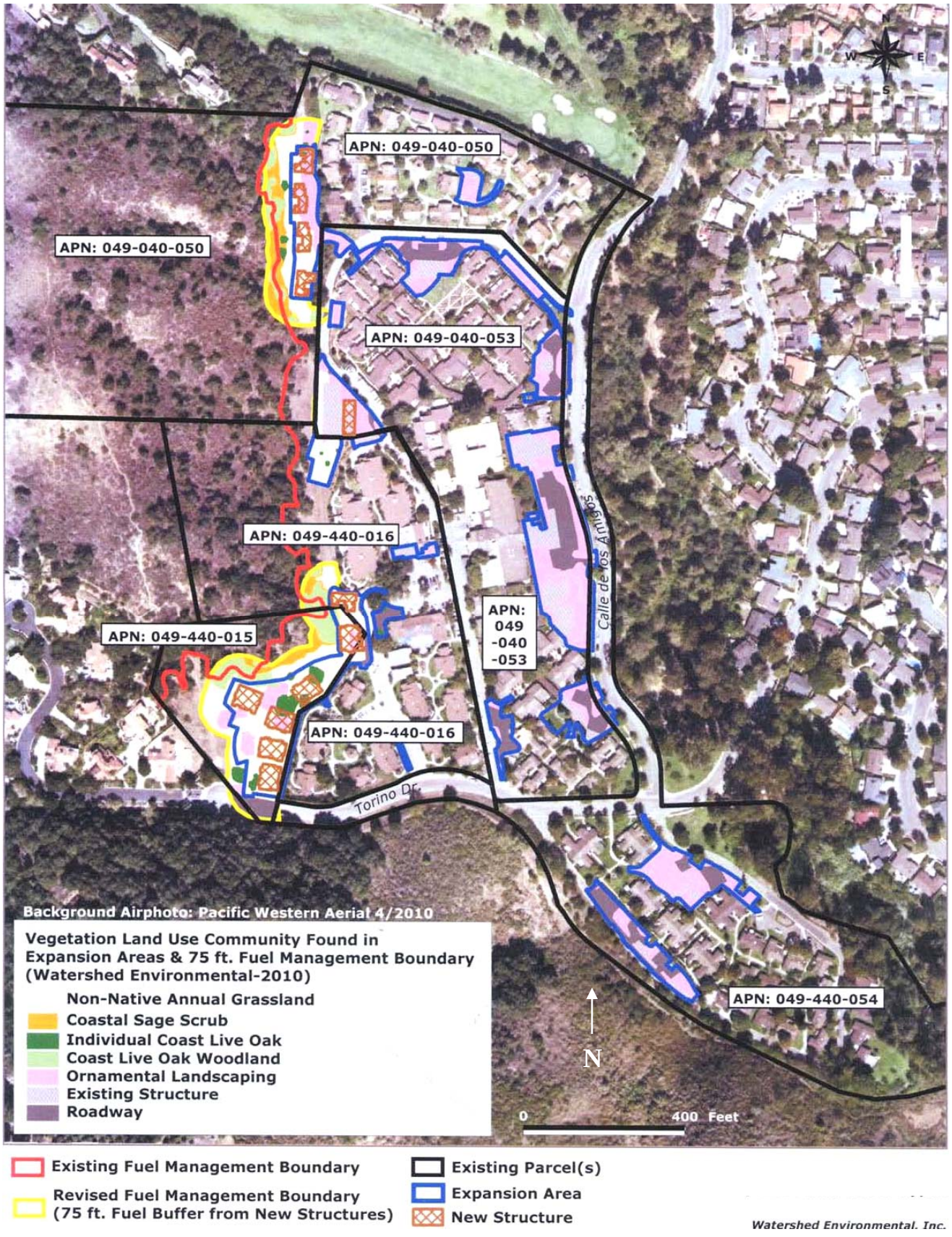
Vegetation Communities and Urban Land Cover. Five plant community types are located on the project site, including arroyo willow riparian, non-native annual grassland, coastal sage scrub, coast live oak woodlands, and ornamental landscape. In addition, two land cover types are located on the project site, consisting of structures and roadways. Table 5.2-1 provides a list of plants observed during the December 15, 2009, January 26, and February 26, 2010 field surveys, and Figure 5.2-1 depicts the locations of the existing plant community and land cover types. A description of each vegetation community and land cover type located on the project site is provided below.

Arroyo Willow Riparian Woodland occurs along the bed and banks of Arroyo Burro Creek on the east side of Calle De Los Amigos. The south area of the project site (refer to Figure 3.4-1) is the only area where this plant community occurs. The dominant tree in this riparian community is arroyo willow, however, there are also scattered western sycamore and Southern California black walnut trees. Dominant groundcover vegetation within this community type includes periwinkle, California blackberry, garden nasturtium, cape ivy, and smilo grass.

Nonnative Annual Grassland occurs on the southern and eastern portions of the Rutherford parcel, and within the existing fuel management areas located on the west area of the project site. The dominant grass species in this community are rip-gut brome, rattail fescue and soft chess. Other herbaceous non-grass dominant plants in this community include redstem filaree, broad-leaved filaree, burr clover, sour-grass, smooth cat's ear, and chickweed.

Coastal Sage Scrub occurs on the hillside on the western portion of the Rutherford parcel, and on the hillside west of the existing developed area on the west area of the project site. Coastal sage scrub vegetation is also present on the hillside south of the Valle Verde property. This community has high native plant species diversity and is dominated by the following perennial native shrubs: California sagebrush, coyote brush, encelia, giant wild rye, alkali rye, poison oak, California croton, California buckwheat, sawtooth goldenbush, coastal goldenbush, redberry, climbing honeysuckle, hummingbird sage, western bracken, coffeeberry, fuchsia-flowered gooseberry, California blackberry, Mexican elderberry, bee plant, Douglas' nightshade, common woodmint, southern bush monkey flower, wild cucumber, and green everlasting. Scattered among these shrubs are a few native perennial grasses purple needlegrass and small-flowered melic, along with some non-native annual grasses.

Coast Live Oak Woodland occurs on the hillside in the western portion of the Rutherford parcel, and on the hillside west of the existing developed area on the west area of the project site. The dominant tree in this community is coast



City of Santa Barbara

Valle Verde Retirement Community
Project EIR

Figure 5.2-1

Valle Verde Campus Vegetation and Land Use Types

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live oak, while the understory vegetation is a mixture of coastal sage scrub species.

Ornamental Landscape occurs within and adjacent to roadways, parking lots, and structures. These areas are landscaped with a variety of non-native ornamental trees and shrubs, and turfgrass. This plant community type is actively managed and maintained by Valle Verde personnel. Scattered within this landscaped area are native oak trees and western sycamore trees. These native trees appear to have been planted as part of the landscaping or in some cases may be relic trees from the agricultural use that existed prior to development of Valle Verde.

Roadways include existing public and private paved roads, parking areas, and other paved surfaces.

Structures include all buildings, garages, carports, and other physical structures, the majority of which are located within 650 feet of Calle de los Amigos.

Table 5.2-1
Vegetation Observed within Valle Verde Expansion Project Area

Scientific Name	Common Name	Native (N) Introduced (I)
Acacia melanoxylon	black acacia	I
Aesculus californica	California buckeye (ornamental)	N
Ambrosia psilostachya	western ragweed	N
Anagallis arvensis	scarlet pimpernel	I
Artemisa californica	California sagebrush	N
Artemisa douglasiana	mugwort	N
Avena fatua	wild oat	I
Baccharis pilularis var. *consanguinea*	coyote brush	N
Brassica nigra	black mustard	I
Brassica rapa	field mustard	I
Bromus diandrus	ripgut brome	I
Bromus hordeaceus	soft chess	I
Bromus madritensis rubens	red brome	I
Calandrinia ciliata	red maids	N
Calystegia macrostegia ssp. *cyclostegia*	coastal morning-glory	N
Carduus pycnocephalus	Italian thistle	I
Carpobrotus edulis	ice plant	I
Claytonia perfoliata ssp. *mexicana*	miner's lettuce	I
Conium maculatum	poison hemlock	I
Convolvulus arvensis	bindweed	I
Conyza bonariensis	flax-leaved fleabane	I
Cortaderia jubata	jubata grass	I
Croton californicus	California croton	N
Cupresssus macrocarpa	Monterey cypress	N
Cynodon dactylon	bermudagrass	I
Datura wrightii	toloache	N
Delairea odorata	cape ivy	I

Table 5.2-1
Vegetation Observed within Valle Verde Expansion Project Area

Scientific Name	Common Name	Native (N) Introduced (I)
Dichelostema capitatum	blue dicks	N
Diplacus aurantiacus	bush monkeyflower	N
Dudleya lanceolata	rock lettuce	N
Encelia californica	coastal encelia	N
Eriogonum fasciculatum	California buckwheat	N
Eriophyllum confertiflorum	golden yarrow	N
Erodium borys	broad-leaved filaree	I
Erodium cicutarium	redstem filaree	I
Eschscholzia californica	California poppy	N
Euphorbia peplus	petty spurge	I
Filago gallica	narrow-leaved filago	I
Foeniculum vulgare	fennel	I
Geranium dissectum	cut-leaved geranium	I
Gnaphalium californicum	green everlansting	N
Hazardia squarrosa var. *squarrosa*	sawtooth goldenbush	N
Hedera canariensis	Algerian ivy	I
Heteromeles arbutifolia	toyon	N
Heterotheca grandiflora	telegraphweed	I
Hirschfeldia incana	Mediterranean mustard	I
Hordeum murinum	foxtail	I
Hypochaeris glabra	smooth cat's ear	I
Isocoma menziesii	coastal goldenbush	N
Jacaranda sp.	jacaranda	I
Juglans californica	Southern California black walnut	N
Keckilia cordifolia	climbing honeysuckle	N
Lactuca serriola	prickly lettuce	I
Lepidium nitidum var. *nitidum*	common peppergrass	N
Lessingia filaginifolia var. *filaginifolia*	California aster	N
Leymus condensatus	giant wild rye	N
Leymus triticoides	alkali rye	N
Lolium multiflorum	Italian rye	I
Lonicera subspicata var. *subspicata*	Santa Barbara honeysuckle	N
Lotus scoparius	deerweed	N
Lupinus bicolor	Lindley's annual lupine	N
Lupinus nanus	sky lupine	N
Malocothamnus fasciculatus	chaparral mallow	N
Malva parviflora	cheeseweed	I
Marah macrocarpus var. *macrocarpus*	wild cucumber	N
Marrubium vulgare	horehound	I
Medicago polymorpha	burr clover	I
Melica imperfecta	small-flowered melic	N
Melilotus indicus	yellow sweet clover	I
Mimulus longiflorus var. *longiflorus*	southern bush monkey flower	N
Mirabilis californica	wishbone bush	N

Table 5.2-1
Vegetation Observed within Valle Verde Expansion Project Area

Scientific Name	Common Name	Native (N) Introduced (I)
Myoporum laevis	myoporum	I
Nassella pulchra	purple needlegrass	N
Nicotiana glauca	tree tobacco	I
Oxalis pes-caprae	sour-grass	I
Paeonia californica	peony	N
Phacelia ramosissima var. *austrolitoralis*	rambling phacelia	N
Pholistoma auritum	fiesta flower	I
Pinus radiata	Monterey pine	N
Piptatherum (Oryzopsis) miliaceum	smilo grass	I
Pittosporum undulatum	pittosporum	I
Plantago major	common plantain	I
Platanus racemosa	western sycamore	N
Pteridium aquilinum var. *pubescens*	western bracken	N
Quercus agrifolia	coast live oak	N
Raphanus sativus	wild radish	I
Raphiolepis sp.	hawthorne bush (ornamental)	I
Rhamnus californica	coffeeberry	N
Rhamnus crocea	redberry	N
Rhus integrifolia	lemonadeberry	N
Ribes speciosum	fuchsia-flowered gooseberry	N
Ricinus communis	castor bean	I
Rubus ursinus	California blackberry	N
Rumex acetosella	sheep sorrel	I
Rumex crispus	curly dock	I
Salix lasiolepis	arroyo willow	N
Salvia mellifera	black sage	N
Salvia spathacea	hummingbird sage	N
Sambucus mexicanus	Mexican elderberry	N
Schinus molle	Peruvian pepper	I
Scrophularia californica var. *californica*	bee plant	I
Sequoia sempervirens	coast redwood	N
Silene gallica	windmill pink	I
Sisyrinchium bellum	blue-eyed grass	N
Solanum douglasii	Douglas' nightshade	N
Sonchus oleraceus	sowthistle	I
Stachys bullata	common woodmint	N
Stellaria media	chickweed	I
Taraxacum officinale	dandelion	I
Toxicodendron diversilobum	poison oak	N
Tropaeolum majus	garden nasturtium	I
Vicia benghalensis	purple vetch	I
Vicia sativa	common vetch	I
Vinca major	periwinkle	I
Vulpia myuros var. *myuros*	rattail fescue	I

Wildlife. A variety of common wildlife species were observed during the 2006 surveys performed by Laurence Hunt and during the December 15, 2009, January 26, and February 25, 2010 surveys performed by Watershed Environmental. Observed wildlife includes 22 species of birds, six species of mammals, and one species of reptile. However, many other bird, mammal, amphibian, and reptile species are expected to occur and/or have the potential to occur on the project site given the habitat types present in the area, the adjacent land use and habitat types, and geographic location of the site. Table 5.2-2 lists wildlife species that have been observed on the project site, that are expected to use the site, or have the potential to occur on the site.

Most of the areas on the project site where new development has been proposed are located within existing developed areas (i.e., infill development) where the wildlife habitat is an urban landscaped environment with residential structures, paved roadways and parking areas. The wildlife species that typically occur in developed/landscape environments are adapted to frequent human disturbance and are relatively common species that are considered habitat generalists. Developed/urban areas do not serve as wildlife movement corridors due to the lack of shelter and high levels of disturbance (noise, light, and human presence).

Proposed development on the Rutherford parcel and on the west area of the project site would occur adjacent to existing developed areas and within non-native grassland areas that are currently managed for wildfire protection purposes. Development in these areas would also be adjacent to coastal sage scrub and coast live oak woodland habitat. Wildlife use of managed grassland areas is limited by the area's openness as the grasses are regularly mowed, and the lack of cover/shelter. During the performance of field surveys for this EIR, no evidence was observed, such as a game trail with animal tracks, scat, or trampled vegetation, which would indicate that this open non-native grassland habitat is used by wildlife as a movement corridor. The open grassland area is, however, adjacent to scrub and woodland habitat and is used as foraging habitat by a variety of raptors and owls that prey on small mammals (pocket gophers, mice, brush rabbits) that graze in this grassland, and on reptiles that stray or attempt to cross the grassland area.

There are several large undeveloped open space areas located on the hills south and west of the Valle Verde campus, including a dedicated open space area on the adjacent Hidden Oaks subdivision. Wildlife movement within and between these open space areas is unrestricted. In addition, Arroyo Burro Creek and the associated riparian habitat located adjacent (east) of Valle Verde presumably serves as a wildlife movement corridor in a north and south direction and may in locations where the creek banks are not too steep, provide wildlife lateral access to undeveloped open space areas adjacent to Valle Verde. The presence of undeveloped open space adjacent to Arroyo Burro Creek enhances the wildlife habitat value and increases the sustainability of the wildlife habitat in the project area and in the entire lower portion of the Arroyo Burro Creek watershed south of the 101 Freeway.

The list of wildlife species provided on Table 5.2-2 is not intended to be a complete inventory of all species potentially present in the Valle Verde project area. Other species may periodically use and/or visit the site that were not included in the list. It should also be recognized that wildlife movement and habitat use is dynamic and subject to change in response to natural and manmade conditions.

Table 5.2-2
Wildlife Species Observed, Expected, or Potentially Occurring

Common Name	Scientific Name	Seasonal Status	Site Status
Amphibians			
black-bellied slender salamander	*Batrachoseps nigriventris*	RB	E
California tree frog	*Pseudacris* (=*Hyla*) *cadaverina*	RB	E
ensatina	*Ensatina eschscholtzii*	RB	E
arboreal salamander	*Aneides lugubris*	RB	E
western toad	*Bufo boreas*	RB	E
Pacific tree frog	*Pseudacris* (=*Hyla*) *regilla*	RB	E
Reptiles			
ringneck snake	*Diadophis punctatus*	RB	E
coast horned lizard	*Phrynosoma coronatum blainvillii*	RB	P
common king snake	*Lampropeltis getulus*	RB	E
gopher snake	*Pituophis catenifer*	RB	E
silvery legless lizard	*Anniella pulchra*	RB	P
southern alligator lizard	*Elgaria multicarinata*	RB	E
western fence lizard	*Sceloporus occidentalis*	RB	O
western skink	*Eumeces skiltonianus*	RB	E
western rattlesnake	*Crotalus viridis*	RB	E
Birds			
acorn woodpecker	*Melanerpes formicivorus*	RB	O
Allen's hummingbird	*Selasphorus sasin*	M	E
American crow	*Corvus brachyrhynchos*	RB	O
American goldfinch	*Carduelis tristis*	WV	E
American kestrel	*Falco sparverius*	RB	E
American robin	*Turdus migratorius*	WV	E
Anna's hummingbird	*Calypte anna*	RB	O
ash-throated flycatcher	*Myiarchus cinerascens*	SB	E
band-tailed pigeon	*Columda fasciata*	RB	E
bank swallow	*Riparia riparia*	RB	E
barn owl	*Tyto alba*	RB	E
barn swallow	*Hirundo rustica*	SB	E
Bewick's wren	*Thryomanes bewickii*	RB	O
black phoebe	*Sayornis nigricans*	RB	O
black-headed grosbeak	*Pheucticus melanocephalus*	SB	P
black-shouldered kite	*Elanus axillaris*	RB	E
brown towhee	*Pipilo fuscus*	RB	E
brown-headed cowbird	*Molothrus ater*	SB	E

Table 5.2-2
Wildlife Species Observed, Expected, or Potentially Occurring

Common Name	Scientific Name	Seasonal Status	Site Status
bushtit	*Psaltriparus minimus*	RB	O
California quail	*Callipepla californica*	RB	O
California thrasher	*Toxostoma redivivum*	RB	E
California towhee	*Pipilo crissalis*	RB	O
cedar waxwing	*Bombycilla cedrorum*	WV	P
cliff swallow	*Hirundo pyrrhonota*	SB	E
common yellowthroat	*Geothlypis trichas*	RB	E
Cooper's hawk	*Accipiter cooperii*	RB	O
dark-eyed junco	*Junco hyemalis*	RB	E
downy woodpecker	*Picoides pubescens*	RB	P
European starling	*Sturnus vulgaris*	I	E
golden-crowned sparrow	*Zonotrichia atricapilla*	WV	E
great blue heron	*Ardea herodias*	RB	E
great horned owl	*Bubo virginianus*	RB	E
house finch	*Carpodacus mexicanus*	RB	O
house sparrow	*Passer domesticus*	I	E
house wren	*Troglodytes aedon*	RB	E
killdeer	*Charadrius vociferous*	RB	E
Lawrence's goldfinch	*Carduelis lawrencei*	M	P
lesser goldfinch	*Carduelis psaltria*	RB	P
loggerhead shrike	*Lanius ludovicianus*	WV	O
mourning dove	*Zenaida macroura*	SB	O
northern flicker	*Colaptes auratus*	RB	O
northern harrier	*Circus cyaneus*	WV	E
northern mockingbird	*Mimus polyglottos*	RB	O
northern oriole	*Icterus bullockii*	M	P
Nuttall's woodpecker	*Picoides nuttallii*	RB	P
oak titmouse	*Bacolophus ridgwayi*	RB	O
Pacific-slope flycatcher	*Empidonax difficilis*	SB	E
purple finch	*Carpodacus purpurius*	RB	E
red-shouldered hawk	*Buteo lineatus*	RB	O
red-tailed hawk	*Buteo jamaicensis*	RB	O
rock pigeon	*Columba livia*	RB	E
ruby-crowned kinglet	*Regulus calendula*	WV	E
Rufous-crowned sparrow	*Aimophila ruficeps*	RB	E
Say's phoebe	*Sayornis saya*	RB	E
sharp-shinned hawk	*Accipiter striatus*	WV	P
song sparrow	*Melospiza melodia*	RB	E
spotted towhee	*Pipilo maculatus*	RB	O
turkey vulture	*Cathartes aura*	V	O
western gull	*Larus occidentalis*	RB	O
western screech-owl	*Otus kennicottii*	RB	E
western scrub-jay	*Aphelocoma californica*	RB	O
white-breasted nuthatch	*Sitta carolinensis*	RB	P
white-crowned sparrow	*Zonotrichia leucophrys*	WV	O
white-tailed kite	*Elanus leucurus*	RB	E
white-throated swift	*Aeronautes saxatalis*	V	P

Table 5.2-2
Wildlife Species Observed, Expected, or Potentially Occurring

Common Name	Scientific Name	Seasonal Status	Site Status
Wrentit	*Chamaea fasciata*	RB	P
yellow warbler	*Dendroica petechia*	V	P
yellow-rumped warbler	*Dendroica coronata*	WV	O
Mammals			
big brown bat	*Eptesicus fuscus*	SB	E
black-tailed deer	*Odocoileus hemionus*	RB	P
black rat	*Rattus rattus*	I	E
bobcat	*Lynx rufus*	RB	P
Botta's pocket gopher	*Thomomys bottae*	RB	O
Brazilian free-tailed bat	*Tadarida brasiliensis*	RB	S
broad-footed mole	*Scapanus latimanus*	RB	O
brush rabbit	*Sylvilagus bachmani*	RB	O
California ground squirrel	*Spermophilus beecheyi*	RB	O
California mouse	*Peromyscus californicus*	RB	E
California myotis	*Myotis californicus*	SB	E
California vole	*Microtus californicus*	RB	E
coyote	*Canis latrans*	V	O
deer mouse	*Peromyscus maniculatus*	RB	E
dusky-foot woodrat	*Neotoma fuscipes*	RB	E
feral cat	*Felis catus*	I	E
red fox	*Vulpes vulpes*	RB	E
gray fox	*Urocyon cinereoargenteus*	RB	P
Merriam's chipmunk	*Eutamias merriami*	RB	P
ornate shrew	*Sorex ornatus*	RB	E
pallid bat	*Antrozous pallidus*	SB	E
raccoon	*Procyon lotor*	V	E
striped skunk	*Mephitis mephitis*	V	E
Virginia opossum	*Didelphis virginiana*	I	O
western harvest mouse	*Reithrodontomys megalotis*	RB	E
western spotted skunk	*Spilogale gracilis*	V	E

Codes
Seasonal Status: RB = Resident Breeder; SB = Summer Breeder; M = Migrant; V = Visitor; WV = Winter Visitor; I = Introduced Species
Site Status: E = Expected to occur at the project site; O = Observed on or in the immediate vicinity of the project site; P = Potential to occur

Sensitive Species. Sensitive species considered in this assessment are those protected by the federal Endangered Species Act and/or the California Endangered Species Act and those species meeting the CEQA definition of "rare." This includes all endangered or threatened species, candidates for listing, or Species of Special Concern listed by the federal and state governments, and plants listed by the California Native Plant Society (CNPS) as List 1 or List 2, as well as plants listed by the Santa Barbara Botanic Garden (2007) as locally sensitive.

During the biological field surveys performed on December 15, 2009, January 26, and February 25, 2010, no sensitive plants or wildlife species were found within the areas where development and/or fuel modification are proposed. The areas where development and/or disturbance would occur do not contain any standing water or topographic features such as vernal pools, vernal swales, grassy depressions, or any other suitable breeding habitat for vernal pool fairy shrimp or amphibians. The nearest aquatic habitat is Arroyo Burro Creek, which is on the project site along the east side of Calle de los Amigos Road.

Laurence Hunt reported finding cithara buckwheat *(Eriogonum cithariforme)* an annual plant in the buckwheat family that was considered to be a sensitive plant in a 1988 report prepared by Wiskowski for the County of Santa Barbara. This plant was not found by Watershed Environmental during the performance of field surveys in the proposed development areas. It is the professional opinion of Watershed Environmental that this plant does not meet the CEQA definition of "Rare." The occurrence of this plant is described in *A Flora of the Santa Barbara Region, California* (Smith 1998) as "commonly scattered… in Foxen Canyon Santa Barbara, but usually along roads and about broken ground of woodland/chaparral in mountainous parts of the county, from the crest of Santa Ynez Mountains north of Santa Barbara to Buellton, Los Alamos, Lompoc, upper Santa Ynez River to higher San Rafel Mountains, Sierra Madre , Reyes Creek, Pine Mountain ridge, upper Sespe Creek watershed and Lockwood Valley." This plant is also not listed by the California Native Plant Society, which maintains a current list of rare and endangered plants of California on their website at www.cnps.org and this plant is not listed as locally sensitive by the Santa Barbara Botanic Garden (SBBG 2007).

Laurence Hunt also reported observing in 2006 the following special status birds in the vicinity of the proposed project development areas: Cooper's hawk, loggerhead shrike, Allen's hummingbird and California thrasher. These birds were not nesting in the project area when they were seen in 2006 and were not seen in the current project area by Watershed Environmental during performance of December 2009, and January, February and March 2010 field surveys. The observation of a threatened, endangered, rare or otherwise sensitive bird foraging, perching, or flying over or near the project site should not be interpreted to mean that development of the project would jeopardize or harm the bird(s). Birds are highly mobile and it is their active nests and burrows that are protected by state and federal laws (California Fish and Game Code and the Federal Migratory Bird Act). In a few instances, when birds depend upon unique and/or rare habitat for foraging and/or shelter, non-nesting/breeding habitat may also be protected. The nests of special status birds are protected by state and federal law during the periods when they are actively being used. A binocular search for raptor nests was performed as part of the surveys performed by Watershed Environmental and no nests were found within 500 feet of the proposed development areas.

There are a number of sensitive species occurrence records in the vicinity of the Valle Verde campus mapped by the CDFG's California Natural Diversity Database (CDFG 2010). In addition, several species meeting the sensitive species criteria described above were previously identified by Hunt (2008) as known to occur and

potentially occurring in the project area. Of the 42 sensitive wildlife species identified on Table 5.2-3, 16 species have a moderate to high potential to occur in the project area, including: three reptiles (silvery legless lizard, coast horned lizard and coast patch-nosed snake); nine species of birds (Allen's hummingbird, bank swallow, California thrasher, Cooper's hawk, lark sparrow, loggerhead shrike, northern harrier, sharp-shinned hawk and white-tailed kite); three mammals (pallid bat, western red bat and Townsend's big-eared bat); and one insect (monarch butterfly).

As part of this assessment it was determined that five species of sensitive plants have a potential to occur in the project area, and two of these species are perennial plants (Mesa horkelia and Santa Barbara honeysuckle) that have a moderate to high potential for occurrence. The other three plant species are unlikely to exist on the project site because suitable habitat is not provided. Since Mesa horkelia and Santa Barbara honeysuckle are perennial plants, they would have been readily observed during performance of on-site surveys. These plants were not observed in the project development or fuel management areas during the performance of field surveys.

The majority of the proposed Valle Verde development would occur in areas that are already developed and/or are landscaped. The proposed development on the Rutherford parcel and on the west area of the project site would occur in non-native annual grassland habitat, and would be adjacent to coastal sage scrub and coast live oak woodland habitat that exits on the hillside west of the proposed development. From a biological perspective, the development on this portion of the project site and the disturbance caused by fuel management actives is the only aspect of the Valle Verde project with a potential to impact sensitive biological resources. The existing non-native grassland habitat in the proposed development areas is used by a variety of raptors for foraging. Additionally the soil underlying this portion of the project site is the Arnold sandy loam, which is suitable for silvery legless lizards and coast horned lizards.

Table 5.2-3
Sensitive Species Evaluation of Occurrence Potential

Common Name	Scientific Name	Special Status	Occurrence Potential	Notes
Fish				
southern steelhead	*Oncorhyncus mykiss iridius*	FE	None in project area.	Nearest suitable aquatic habitat is offsite in Arroyo Burro Creek.
tidewater goby	*Eucyclogobius newberryi*	FE, CSC	None in project area.	Nearest suitable aquatic habitat is offsite in Arroyo Burro Creek and Hendry's Beach.
Birds				
Allen's hummingbird	*Selasphorus sasin*	MNGBMC	Assumed present during winter migration. Not known to breed in Santa Barbara County.	This is a transient species which is seen in Santa Barbara County during its winter migration.
bank swallow	*Riparia riparia*	CT	Assumed present but foraging only. No breeding/nesting habitat in project area.	Preferred breeding habitat is river and creek banks, where bird nests in colonies on steep creek and river banks. Nearest suitable breeding/nesting habitat is offsite in Arroyo Burro Creek.
Burrowing owl	*Athene cunicularia*	CSC	None in project area.	Preferred habitat is large expanses of open grasslands, with little human presence. Suitable habitat is not present in the project area.
California horned lark	*Eremophila alpestris*	MNGBMC	None in project area	Preferred habitat is large expanses of open habitat with sparse vegetation. Suitable habitat is not present in the project area.
California thrasher	*Toxostoma redivivum*	MNGBMC	Moderate potential in coastal sage scrub/oak woodland habitat where fuel management activities are planned on parcel (APN: 049-040-050) on the west	Preferred habitat is dense chaparral and coastal sage scrub vegetation.

Table 5.2-3
Sensitive Species Evaluation of Occurrence Potential

Common Name	Scientific Name	Special Status	Occurrence Potential	Notes
			side of where four new residence structures will be constructed.	
common yellowthroat	*Geothlypis trichas*	CSC	None in project area.	Preferred breeding habitat is wet thickets and freshwater marshes; neither present in project area.
Cooper's hawk	*Accipiter cooperii*	CWL	Assumed present but foraging only. Unlikely breeding/nesting habitat in project area.	Preferred breeding habitat is forests and woodlands neither of which exist in the areas where development is proposed.
grasshopper sparrow	*Ammodramus savannarum*	CSC	Low potential for occurrence in project area.	Preferred habitat is large expanses of open grasslands, with little human presence. Suitable habitat is not present in the project area.
lark sparrow	*Chondestes grammacus*	MNGBMC	Moderate potential for occurrence in non-native annual grasslands which exist on western portion of project site on the Rutherford parcel (APN: 049-440-015), and on parcels (APN: 049-440-016 and 049-040-050)	Preferred habitat is grasslands and agricultural fields.
loggerhead shrike	*Lanius ludovicianus*	CSC	High potential for occurrence foraging only species is a winter visitor.	Preferred habit is coastal sage scrub, chaparral and oak woodlands.

Table 5.2-3
Sensitive Species Evaluation of Occurrence Potential

Common Name	Scientific Name	Special Status	Occurrence Potential	Notes
northern harrier	*Circus cyaneus*	CSC	Assumed present but foraging only. Unlikely breeding/nesting habitat in project area.	Preferred breeding habitat is bogs and open marshes; neither is present in project area.
olive-sided flycatcher	*Contopus borealis*	MNGBMC	None in project area.	Preferred habitat is coniferous forests, bogs, and occasionally in riparian woodlands. Suitable breeding habitat is not present in project area.
pacific-slope flycatcher	*Empidonax difficilis*	MNGBMC	None in project area	Preferred habitat riparian woodlands. Suitable breeding habitat is not present in project area.
purple martin	*Progne subis*	CSC	None in project area	Preferred habitat riparian woodlands. Suitable breeding habitat is not present in project area.
red-breasted sapsucker	*Sphyrapicus ruber*	MNGBMC	Low potential for occurrence foraging only. Species is a transient winter visitor.	Preferred breeding habitat is coniferous woodland. Foraging habitat includes a wide variety of native and ornamental trees.
sharp-shinned hawk	*Accipiter striatus*	CWL	Assumed present but foraging only. Unlikely breeding/nesting habitat in project area.	Preferred breeding habitat is oak woodland and oak forests; neither is present in project area.
short-eared owl	*Asio flammeus*	CSC	None in project area. Species is a transient winter visitor	Preferred habitat is large expanses of grassland and marshland habitat; neither is present in project area.
Swainsons thrush	*Catharus ustulatus*	CSC	Low potential for occurrence in project area	Preferred breeding habitat is riparian woodlands. Suitable breeding habitat is not present is project area

Table 5.2-3
Sensitive Species Evaluation of Occurrence Potential

Common Name	Scientific Name	Special Status	Occurrence Potential	Notes
Vaux's swift	*Chaetura vauxi*	FSS; CSC	None in project area. Species is a transient winter and fall visitor	Preferred habitat is riparian woodlands, riparian scrub, and grasslands near water. Suitable habitat is not present is project area.
western meadowlark	*Wilsonia pusilla*	SLC	Low potential in project area	Preferred habitat is large expanses of open grasslands, with little human presence. Suitable habitat is not present in the project area.
western snowy plover	*Charadrius alexandrinus nivosus*	FT, CSC	None in project area.	Preferred habitat for breeding and foraging is shoreline and dunes; neither is present in project area.
white-tailed kite	*Elanus leucurus*	CFP	Assumed present but foraging only. Unlikely breeding/nesting habitat in project area.	Preferred breeding habitat is tall trees in areas with little human disturbance. Forages in grasslands and marsh habitat. During non-breeding season roosts communally in orchards and small groves. Suitable nesting habitat is not present in project area.
Wilson's warbler	*Catharus ustulatus*	SLC	Low potential in project area	Preferred breeding habitat is riparian woodlands and thickets. Suitable nesting habitat is not present in project area.
yellow warbler	*Dendroica petechia brewsteri*	CSC	None in project area.	Preferred breeding habitat is riparian woodlands; not present in project area.
Crustaceans				
vernal pool fairy shrimp	*Branchinecta lynchi*	FT	None in project area.	Require ponded surface water for 2-6 weeks for annual life cycle. No ponds or other topographic features within project area.
Insects				
globose dune beetle	*Coelus globosus*	SLC	None in project area.	Nearest suitable dune habitat is Hendry's Beach.

Table 5.2-3
Sensitive Species Evaluation of Occurrence Potential

Common Name	Scientific Name	Special Status	Occurrence Potential	Notes
monarch butterfly	*Danaus plexippus*	CSC	Assumed present but foraging only. No winter aggregation sites/habitat in project area.	Winter aggregation sites are typically formed in dense eucalyptus groves for protection from wind/rain. No groves present in project area.
Amphibians				
California red-legged frog	*Rana aurora draytonii*	FT, CSC	None in project area.	Nearest suitable aquatic habitat is offsite in Arroyo Burro Creek and there are no reported observations of this species in the lower reach of Arroyo Burro Creek. The segment of the creek near the project site is deeply incised with 25-50 ft. high vertical banks and is a barrier to lateral wildlife movement from aquatic habitat to upland habitat. All of the proposed development near the creek will occur in existing developed and landscaped areas.
coast range newt	*Taricha torosa torosa*	CSC	None in project area.	Nearest suitable aquatic habitat is offsite in Arroyo Burro Creek and there are no reported observations of this species in the lower reach of Arroyo Burro Creek. The segment of the creek near the project site is deeply incised with 25-50 ft. high vertical banks and is a barrier to lateral wildlife movement from aquatic habitat to upland habitat. All of the proposed development near the creek will occur in existing developed and landscaped areas.

Table 5.2-3
Sensitive Species Evaluation of Occurrence Potential

Common Name	Scientific Name	Special Status	Occurrence Potential	Notes
Reptiles				
silvery legless lizard	*Anniella pulchra pulchra*	CSC	High potential for occurrence in the development area on parcel (APN: 049-040-050) where four new residence structures will be constructed.	Preferred habitat is oak woodland, coastal sage scrub, open chaparral and grasslands with sandy soil such as the Arnold series sandy loam soil which occurs in the northwest corner of the Valle Verde development area.
coast horned lizard	*Phrynosoma coronatum*	CSC	Moderate potential for occurrence in the development area on parcel (APN: 049-040-050) where four new residence structures will be constructed.	Preferred habitat is oak woodland, coastal sage scrub, dune scrub, and chaparral on sandy soil such as the Arnold series sandy loam soil which occurs in the northwest corner of the Valle Verde development area.
coast patch-nosed snake	*Salvadora hexalepis virgultea*	CSC	Moderate potential in coastal sage scrub/oak woodland habitat where fuel management activities are planned on parcel (APN: 049-040-050) on the west side of where four new residence structures will be constructed.	Preferred habitat is coastal sage scrub, open chaparral and grasslands. The only development area where there is a potential for this animal to occur is in the northwest corner of the Valle Verde development area and in the fuel modification areas adjacent to this development.
southwestern pond turtle	*Clemmys marmorata pallid*	CSC	None in project area.	Nearest suitable aquatic and riparian habitat is offsite in Arroyo Burro Creek and there are no reported observations of this species in the lower reach of Arroyo

Table 5.2-3
Sensitive Species Evaluation of Occurrence Potential

Common Name	Scientific Name	Special Status	Occurrence Potential	Notes
				Burro Creek. The segment of the creek near the project site is deeply incised with 25-50 ft. high vertical banks and is a barrier to lateral wildlife movement from aquatic habitat to upland habitat. All of the proposed development near the creek will occur in existing developed and landscaped areas.
two-striped garter snake	*Thamnophis hammondii*	CSC	Very low potential to none in project area	Nearest suitable aquatic and riparian habitat is offsite in Arroyo Burro Creek and there are no reported observations of this species in the lower reach of Arroyo Burro Creek. The segment of the creek near the project site is deeply incised with 25-50 ft. high vertical banks and is a barrier to lateral wildlife movement from aquatic habitat to upland habitat. All of the proposed development near the creek will occur in existing developed and landscaped areas.
Mammals				
big free-tailed bat	*Nyctinomops macrotis*	CSC	Low potential foraging only in project locations near Arroyo Burro Creek.	Preferred breeding habitat is riparian woodlands and forages in grasslands adjacent to woodlands. Suitable breeding habitat is not present is project area
fringed myotis	*Myotis thysanodes*	BLMS	Low potential foraging only in eastern portion of project area near Arroyo Burro Creek.	Preferred breeding habitat is riparian woodlands and forages in grasslands adjacent to woodlands. Suitable breeding habitat is not present is project area
pallid bat	*Antrozous pallidus*	CSC, BLMS	Moderate potential known to forage on the ground for large	Species forms nocturnal communal roots in sheltered dark locations including hollow trees, buildings, and beneath

Table 5.2-3
Sensitive Species Evaluation of Occurrence Potential

Common Name	Scientific Name	Special Status	Occurrence Potential	Notes
			arthropods in a wide variety of habitat types	bridges.
western red bat	*Lasiurus blossevillii*	CSC USFSS	Moderate potential known to forage for moths beneath street lights in a wide variety of habitat types	Species is solitary prefers to root in deciduous riparian trees, and orchards.
Townsend's big-eared bat	*Corynorhinus townsendii*	CSC BLMS	Moderate potential known to forage insects from the leaves of trees and shrubs in oak and riparian woodlands, coastal sage scrub, and chaparral habitats.	Species is normally solitary except for females with young which form maternity colonies. Prefers to roost in caves and abandoned mines, and has been occasionally found roosting in abandoned buildings.
Yuma myotis	*Myotis yumanensis*	BLMS	Low potential to forage in project area, known to forage over open water for soft-bodies insects.	Species forms communal roosts in under bridges, in buildings, mines, or caves, and even in mud nests made by cliff swallows.
Plants				
Coulter's saltbush	*Atriplex coulteri*	List 1B	Low potential typically occurs in coastal bluff scrub and coastal dune habitat.	Not observed during botanical surveys. Plant community types where it is normally found do not occur in the project area.
Davidson's saltscale	*Atriplex serenana var. davidsonii*	List 1B	Low, potential typically occurs in alkaline soils in costal salt marsh and coastal bluff scrub habitat.	Not observed during botanical surveys. Plant community types where it is normally found do not occur in the project area.

Table 5.2-3
Sensitive Species Evaluation of Occurrence Potential

Common Name	Scientific Name	Special Status	Occurrence Potential	Notes
Santa Barbara morning glory	*Calystegia sepium var. binghamiae*	List 1A	Low, potential typically occurs in in costal salt marsh and riparian habitat.	Not observed during botanical surveys. Plant community types where it is normally found do not occur in the project area. Plant presumed extinct; last observed 1921.
Mesa horkelia	*Horkelia cuneata* ssp. *puberula*	List 1B	Moderate potential in coastal sage scrub and oak woodland habitat.	Not observed during botanical surveys in project locations that are in and/or adjacent to coastal sage scrub and oak woodland habitat.
Santa Barbara honeysuckle	*Lonicera subspicata var. subspicata*	List 1B	High potential in areas of coastal sage scrub habitat and clay soils.	Not observed during botanical surveys in project locations that are in and/or adjacent to coastal sage scrub and oak woodland habitat. Species was however observed on hillside located south of the Valle Verde property.

Status Codes

FT = Federally listed as threatened
FE = Federally listed as endangered
CSC = CDFG California Special-Concern Species
List 1A = CNPS plants presumed extinct in California
List 1B = CNPS plants rare, threatened, or endangered in California and elsewhere
List 2 = CNPS plants rare, threatened, or endangered in California, but more common elsewhere
SE =State-listed as endangered
ST = State-listed as threatened
CFP = CDFG fully protected species
MNGBMC = migratory non-game bird of management concern
SLC = species of local concern
CWL = CDFG watch list
BLMS = bureau of land management sensitive
USFSS = US forest service sensitive

5.2.3 Impact Evaluation Significance Thresholds

Impact evaluation criteria used in the Initial Study prepared for the Valle Verde project indicates that a project would result in a significant impact to biological resources if it would result in:

A. Elimination or substantial reduction or disruption of important natural vegetative communities and wildlife habitat or migration corridors, such as oak woodland, coastal strand, riparian, and wetlands.

B. Substantial effect on protected plant or animal species listed or otherwise identified or protected as endangered, threatened or rare.

C. Substantial loss or damage to important native specimen trees or designated landmark or historic trees.

5.2.4 Impact Evaluation

This section describes the potential short- and long-term impacts to biological resources that would result from construction and operation of the proposed Valle Verde project. Short-term impacts are those associated with site preparation and construction. Long-term impacts are those that would occur after construction and persist over the life of the project.

Botanical Resources

Vegetation Communities and Wildlife Habitat. Implementation of the Valle Verde project would directly impact 4.58 acres of landscape area, native and non-native vegetation/wildlife habitat. The 4.58 acres of vegetation would be impacted and permanently removed by proposed structures and/or pavement. The project would also impact 2.33 acres of existing developed (land cover) area. These developed areas of the project site would be impacted by demolition and construction activities. Table 5.2-4 provides a summary of project-related impacts caused by new and expanded development, and the location of impacted areas are depicted on Figure 5.2-1.

Table 5.2-4
Direct Impacts to Vegetation Communities and Wildlife Habitat

Vegetation and Land Cover Types	Area (sq. ft.)	Area (acres)
Vegetation Communities		
Coast Live Oak Woodland	1,534	0.04
Coastal Sage Scrub	401	0.01
Individual Coast Live Oak Trees	7,322	0.17
Non-Native Annual Grassland	70,384	1.62
Ornamental Landscaping	116,722	2.74
Subtotal	*196,363*	*4.58*
Land Cover Types		
Existing Structure	46,654	1.07
Roadway	54,904	1.26
Subtotal	*101,558*	*2.33*
Total Vegetation and Land Cover Impacts From New and Expanded Development	**297,921**	**6.91**

Project-related impacts to 1,534 square feet of coast live oak woodland and 401 square feet of coastal sage scrub are considered **significant but mitigable**. These natural communities provide shelter and cover for birds and small mammals, and Biological Resources policy No. 4 of the City's Conservation Element requires the preservation of oak woodlands to the extent possible.

The proposed project would also result in the conversion of 2.74 acres of ornamental landscaping, 1.62 acres of non-native grassland, and 0.17 acre of individual coast live oak tree canopy area that is part of the project site landscaping to a developed condition. This impact is considered **less than significant** because these community types are either non-native, common in the area, and are not considered high-quality wildlife habitat. Additional analysis of impacts to individual oak trees is provided below.

Fuel Management Activities. Proposed development on the Rutherford parcel and on the west area of the project site will require expansion of the existing fuel management zone into previously undisturbed habitat to meet the Fire Department fuel clearance standards prescribed for this project. Fuel management activities are typically performed once or twice a year for the life of the project. For oak woodland habitat area, fuel management activities generally include the removal of low branches and thinning (removal) or pruning of understory shrubs. For coastal sage scrub habitat areas, fuel management activities typically consist of reducing plant size and density to create a mosaic of various vegetation types and sizes. Certain types of highly flammable plants may be removed. Fuel management in non-native grassland areas usually consists of mowing the grassland. The primary objective of fuel management activities is to reduce fuel loads so if the managed area is affected by a fire, flame heights would be reduced.

Past fuel managements activities on the project site have been conducted within approximately 100 feet of existing structures, consistent with fuel management regulations such as those provided by Public Resources Code Section 4291 (a)(1). Proposed fuel management activities would be conducted as prescribed by the City of Santa Barbara Fire Department, and would occur within 75 feet of new structures. Required fuel management activities would directly impact a total of 0.31 acres (13,824 square feet) of oak woodland and coastal sage scrub vegetation community/wildlife habitat. Table 5.2-5 provides a summary of project impacts caused by proposed fuel management actives. The project impacts listed Table 5.2-5 are limited to areas where fuel management is currently not performed. New areas that would be subject to fuel modification are depicted on Figure 5.2-1.

Table 5.2-5
Direct Impacts to Vegetation Communities and Wildlife Habitat from Required 75-Foot Fuel Management Zone Activities

	Area (sq. ft.)	Area (acres)
Vegetation Communities		
Coast Live Oak Woodland	8,817	0.20
Coastal Sage Scrub	5,007	0.11
Subtotal Impacts From Fuel Modification	**13,824**	**0.31**

The coastal sage scrub and oak woodland habitat areas on the project site that would be affected by proposed fuel management activities provide shelter and cover for wildlife, including birds and small mammals. These habitats are considered to be locally important, biologically diverse, high-quality wildlife habitat for a wide variety of plant and animal species, including a variety of foraging raptors, silvery legless lizards and coast horned lizards, which are considered to be a CDFG Species of Special Concern. Therefore, impacts to vegetation and wildlife habitat resulting from proposed fuel management activities in previously unmanaged oak woodland and coastal sage scrub habitat areas would be **significant but mitigable**.

Disturbance and Removal of Native and Specimen Trees. Implementation of the Valle Verde project would require the removal of 15 coast live oak trees and one (1) Monterey pine tree. The project would significantly impact five (5) coast live oak trees, one (1) redwood, two (2) Monterey pine trees, and one (1) western sycamore tree by encroaching into more than 20 percent of the tree's critical root zone. Table 5.2-6 provides a summary of the impacts to on-site trees that would result from the implementation of the proposed project.

None of the coast live oak trees that would be removed or that would be significantly impacted due to an encroachment into their critical root zones are part of a larger oak grove or oak woodland habitat. The impacted trees are all part of the existing landscaping and a few of the larger trees may be relic trees that existed prior to development of the project.

The Valle Verde Retirement Community Tree Assessment and Protection Plan (Spiewak, 2008) provides eleven tree protection and mitigation measures. The Plan requires that 150 coast live oak saplings be planted in an area located between new development on the western portion of the project site and the hillside containing oak woodland and coastal sage scrub vegetation. Proposed mitigation measures provided by this EIR also require the implementation of specific tree protection measures during project construction. The implementation of the tree protection plan and proposed mitigation measures would reduce project-related impacts resulting from the removal of native and specimen trees to a less than significant level. Therefore, tree removal impacts would be **significant but mitigable**.

In addition to the proposed tree removals, construction activities would significantly encroach into the critical root zone of six (6) coast live oak trees, one (1) redwood tree, two (2) Monterey pine trees, and one (1) western sycamore tree. The project would also result in construction activities that would minimally encroach (less than 20 percent) into the critical root zone of 31 coast live oak trees. Mitigation measures to reduce significant impacts to the 10 identified native and specimen trees that would have significant encroachments into their critical root zone is provided by this EIR. In addition, mitigation is provided to ensure that impacts to the 31 trees with minimal critical root zone encroachment remains less than significant. Therefore, project-related impacts to these trees would be **significant but mitigable.**

Wildlife Species and Habitats

Wildlife Habitat Loss, Migration, and Dispersal. The majority of wildlife habitat that would be affected by the proposed project is low quality ornamental landscaping. Wildlife species that inhabit the ornamental landscaping adjacent to existing developed areas are considered common, and adapted to human disturbance. The project would, however, impact 1.62 acres of non-native annual grassland habitat, 0.24 acre of coast live oak woodland, and 0.12 acre of coastal sage scrub habitat. These habitats, given the underling Arnold sandy loam soils in which they occur, have a moderate to high potential to support silvery legless lizards and coast horned lizards. In addition, the non-native annual grasslands are utilized by a variety of raptors for foraging. The highly mobile species, such as birds, will flee the development areas when site development and construction begins, however, the less mobile species such as ground dwelling small mammals and reptiles will likely be killed during the site development phase of the project.

Wildlife is not expected to use the existing developed portions of the Valle Verde property as a migration or movement corridor due to the high level of human disturbance. Rather, wildlife movement and any migration corridors connecting wildlife habitat exist in the undeveloped natural habitat outside of the existing developed and landscaped areas. Arroyo Burro Creek located to the east of Valle Verde probably serves as a wildlife movement corridor for north and south wildlife movement. However, the creek bed is deeply incised with 25-50 ft. vertical banks and the creek banks adjacent the Valle Verde property are a barrier to ground dwelling wildlife movement. The portions of the project site where development would occur do not contain any aquatic or wetland habitat that could be used by fish, amphibians, or crustaceans for migration or breeding purposes. The currently undeveloped western portion of the project site where new development has been proposed does not show any evidence, such as game trails, animal tracks or scat, of being used a wildlife movement corridor. Other constraints to wildlife

Table 5.2-6
Summary of Impacts to Native and Significant Non-native Trees

ID No.	Tree Type	Type of Disturbance	DBH 1 (inches)	DBH 2 (inches)
23	Coast Live Oak	Tree Removal	16.0	n/a
34	Coast Live Oak	Tree Removal	6.0	n/a
35	Coast Live Oak	Tree Removal	7.0	n/a
36	Coast Live Oak	Tree Removal	7.0	n/a
37	Coast Live Oak	Tree Removal	16.0	n/a
40	Monterey Pine	Tree Removal	35.0	n/a
97	Coast Live Oak	Tree Removal	6.0	n/a
98	Coast Live Oak	Tree Removal	6.0	n/a
99	Coast Live Oak	Tree Removal	6.0	n/a
100	Coast Live Oak	Tree Removal	6.0	n/a
167	Coast Live Oak	Tree Removal	5.0	n/a
168	Coast Live Oak	Tree Removal	8.0	4.0
169	Coast Live Oak	Tree Removal	4.0	n/a
171	Coast Live Oak	Tree Removal	5.0	n/a
172	Coast Live Oak	Tree Removal	4.0	n/a
174	Coast Live Oak	Tree Removal	5.0	n/a
Number of Native and Significant Trees to be Removed				***16***
8	Redwood	Significant (> 20%) Encroachment into Critical Root Zone	13.0	n/a
22	Coast Live Oak	Significant (> 20%) Encroachment into Critical Root Zone	18.0	n/a
24	Coast Live Oak	Significant (> 20%) Encroachment into Critical Root Zone	10.0	n/a
32	Coast Live Oak	Significant (> 20%) Encroachment into Critical Root Zone	20.0	n/a
45	Coast Live Oak	Significant (> 20%) Encroachment into Critical Root Zone	10.0	n/a
70	Monterey Pine	Significant (> 20%) Encroachment into Critical Root Zone	28.0	n/a
104	Sycamore	Significant (> 20%) Encroachment into Critical Root Zone	44.0	n/a

Table 5.2-6
Summary of Impacts to Native and Significant Non-native Trees

ID No.	Tree Type	Type of Disturbance	DBH 1 (inches)	DBH 2 (inches)
155	Monterey Pine	Significant (> 20%) Encroachment into Critical Root Zone	32.0	n/a
166	Coast Live Oak	Significant (> 20%) Encroachment into Critical Root Zone	6.0	n/a
175	Coast Live Oak	Significant (> 20%) Encroachment into Critical Root Zone	10.0	n/a
Number of Trees with Significant (>20%) Encroachment into Critical Root Zone				***10***
6	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	15.0	n/a
7	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	28.0	n/a
9	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	6.0	n/a
13	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	20.0	n/a
14	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	14.0	n/a
15	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	22.0	28.0
16	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	20.0	n/a
17	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	18.0	n/a
18	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	30.0	n/a
19	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	10.0	n/a
28	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	16.0	n/a
29	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	13.0	n/a
30	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	6.0	6.0
31	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	12.0	12.0
39	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	28.0	n/a
84	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	7.0	n/a
86	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	6.0	n/a
96	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	7.0	n/a
101	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	17.0	n/a
102	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	15.0	11.0

Table 5.2-6
Summary of Impacts to Native and Significant Non-native Trees

ID No.	Tree Type	Type of Disturbance	DBH 1 (inches)	DBH 2 (inches)
103	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	17.0	n/a
145	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	8.0	n/a
146	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	14.0	n/a
147	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	8.0	10.0
150	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	6.0	12.0
151	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	5.0	3.0
152	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	14.0	n/a
153	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	17.0	18.0
154	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	31.0	n/a
156	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	12.0	n/a
157	Coast Live Oak	Less than Significant (< 20%) Encroachment into Critical Root Zone	18.0	n/a
Number of Trees with Less than Significant (>20%) Encroachment into Critical Root Zone				***31***

movement through the project area include residential development to the east of the Valle Verde facility; the golf course to the north, which has minimal cover or usable habitat; and steep topography to the west and south. Therefore, short- and long-term wildlife habitat loss and migration and dispersal impacts from the proposed Valle Verde project would be **less than significant**.

Increased Noise and Light. Proposed development on the majority of project site would occur in areas that have been developed with Valle Verde campus facilities. Proposed building and structures in previously developed areas would have little to no effect on wildlife. Proposed development on the western side of the project site, including the Rutherford parcel, would occur to the west of existing developed areas and within areas where fuel management activities are currently performed. Although the managed grassland area is not used extensively by sensitive wildlife species, an increase in noise and light would have the potential to reduce wildlife utilization and affect species composition. Construction activities and related noise would cause short-term increases in noise levels in the project area. The proposed project would not substantially increase long-term noise levels on the project site. Short- and long-term lighting impacts would occur with the addition of exterior lighting around new buildings, walkways, and parking lots.

Short-term construction noise impacts would be minimized through compliance with Initial Study mitigation measure N-2, which requires that construction activities be conducted on weekdays between 8:00 am and 5:00 pm. Limiting construction hours to daytime hours would minimize the potential for impacts during more sensitive nighttime hours when many wildlife species are active. Lighting-related impacts would be minimized through compliance with the City's Outdoor Lighting and Design Ordinance, which requires that the minimum amount of light be provided on the project site, and that lighting not spill over onto adjacent properties. With the implementation of the previously identified mitigation measure and existing ordinance requirements, the short- and long-term impacts of increased noise and light on wildlife in the western portion of the project site would be a **less than significant** impact and no additional mitigation measures are required.

Sensitive Species

Impacts to Sensitive Birds. Surveys were performed within and adjacent to the Valle Verde project proposed development sites. No sensitive wildlife species, sensitive wildlife breeding habitat, or sensitive plants were found. However, there are a number of sensitive birds (primarily raptors) that have been seen and/or are presumed to forage within the non-native grasslands on the western side of the project site. Surveys were performed for active and inactive raptor nests within and adjacent to (within 500 ft. of) the proposed development areas. No nests were found, nor are there any known communal raptor roost sites in or adjacent to the areas where development would occur. Surveys for nesting birds focused on locating inactive nest, which is appropriate since most raptors utilize the same nest year after year, unless there is some kind of disturbance to the nesting tree or area immediately adjacent to the tree. However, given the fact that construction may occur over a period of years, the potential does exist for disturbance of active raptor nests, and other bird nests in trees adjacent to where development would occur. Raptor nests are specifically protected by the California Department of Fish and

Game sections 3500-3516, and all migratory bird nests are protected by the Federal Migratory Bird Treaty Act.

Short-term direct and indirect impacts to active raptor nests, and migratory bird nests are considered to be a **significant but mitigable** impact. Long-term impacts to raptor nests and migratory bird nests are considered to be **less than significant** as raptors and other birds will choose appropriate nesting sites where they will not be disturbed by occupation and use of new Valle Verde structures.

Impacts to Sensitive Reptiles. There are two sensitive reptile species that have a moderate to high potential to occur on the western portion of the project site: the silvery legless lizard and coast horned lizard. Both of these reptile species are a CDFG Species of Special Concern and given this designation also meet the criteria to be considered "rare" as defined under *CEQA Guidelines*. These species are not currently listed by the state or federal Endangered Species Acts as threatened or endangered, nor are they candidates for future listing. The potential exists for direct impacts to silvery legless lizards and coast horned lizards during the grading and site development on the western side of the project site in locations that are not currently landscaped and/or developed and that are underlain by the Arnold sandy loam soils.

Short-term direct impacts to silvery legless lizards, coast horned lizards, both of which are considered to be sensitive species, are **significant but mitigable**. Long-term impacts to silvery legless lizards and coast horned lizards are **less than significant** due to the relatively small amount (approximately two acres) of suitable non-native annual grassland, coastal sage scrub or coast live oak woodland habitat that would be impacted by the project.

Impacts to Sensitive Plants. There are two species of sensitive perennial plants (Mesa horkelia and Santa Barbara honeysuckle) with a potential to occur in the undeveloped western portion of the project site. Surveys for these plants were performed and none were found in the areas where new development would occur or where fuel management activities would be performed. Since these plants are perennial, there is a very low probability that the plants were overlooked during the performance of field surveys. However, in the unlikely event that these plants do exist in the proposed development or fuel management areas, impacts to these plants would need to be avoided where possible and mitigated when avoidance is not feasible. Short-term direct impacts to sensitive plants are considered to be **significant but mitigable**. The proposed project would have **no impact** associated with long-term effects to sensitive plants.

Surface Water Quality

Erosion can cause sedimentation of creeks and can degrade water quality. Suspended sediment can be detrimental to aquatic biota and can smother invertebrates and amphibian eggs, elevate water temperatures, and decrease dissolved oxygen levels. The greatest potential for sediment release would occur if site preparation and grading operations were to occur during the winter season. The project site ultimately drains to Arroyo Burro Creek, which is located along the eastern border of the Valle Verde campus, therefore, the release of sediment from the project site would have the potential to result in adverse effects to Arroyo Burro Creek.

The project would be required to comply with existing regulatory programs during the construction phase to minimize discharges of sediment and other pollutants from the project site. These regulations include, but are not limited to: the City's Storm Water Management Program, the *City of Santa Barbara Storm Water BMP Guidance Manual*, the City Building Division's *Erosion/Sedimentation Control Policy*, the Public Works Department's *Procedures for the Control of Runoff into Storm Drains and Watercourses*, the requirement to prepare and implement an approved Storm Water Pollution Prevention Plan approved by the Regional Water Quality Control Board, and the installation and maintenance of appropriate erosion/sediment control best management practices. Compliance with existing regulatory programs would reduce the potential for short-term erosion- and other project-related water quality impacts to Arroyo Burro Creek to a **less than significant** level and no additional mitigation is required.

After project completion, disturbed areas of the project site would be covered with impervious surfaces or landscaped. Therefore, the project would have a **less than significant** impact related to long-term erosion and other water quality-related effects.

5.2.5 Cumulative Impacts

This section assesses the biological effects of the Valle Verde project in conjunction with other reasonably foreseeable development projects that may occur in the project vicinity. In addition to the Valle Verde project, there are 14 other cumulative development projects within the Arroyo Burro Creek watershed that are considered in this cumulative analysis of biological effects. Four development projects (Valle Verde, Hillside House, Elings Park, and Veronica Meadows) are located south of the 101 Freeway, and 11 projects are located north of the freeway.

From a biological perspective, the location of the cumulative development projects is important because the land use, open space, and wildlife habitat characteristics of the Arroyo Burro Creek watershed are distinctly different north and south of the 101 Freeway. The portion of the Arroyo Burro Creek watershed between the 101 Freeway and Foothill Road is densely developed with a mixture of commercial and residential development, and few open space areas are provided. The wildlife habitat within the Arroyo Burro Creek watershed between the 101 Freeway and Foothill Road has a relatively low wildlife habitat value and affords wildlife few opportunities to find food, shelter and mates.

The lower portion of the Arroyo Burro Creek watershed south of the 101 Freeway has several large undeveloped areas that provide open space, including the 214-acre Elings Park, 70-acre Douglas Family Preserve, 35.7 acres of the Veronica Meadows property, and portions of the 24-acre Hillside House property. In addition to these existing open space areas, the Valle Verde project is proposing to dedicate 9.8 acres of open space on the western side of the project site. The steep hillsides immediately south and west of the Valle Verde property are currently undeveloped and will likely remain undeveloped due to the steepness of the slopes. The existence of these open spaces in the lower portion of the Arroyo Burro Creek Watershed increases the wildlife habitat value of this area, and long-term wildlife sustainability.

The four cumulative development projects (Elings Park, Valle Verde, Hillside House, and Veronica Meadows) in the lower portion of the Arroyo Burro Creek watershed would collectively impact a very small amount of undeveloped natural wildlife habitat and would permanently preserve high quality wildlife habitat through conservation easements and restoration efforts. The 11 cumulative development projects on the north side of the 101 freeway will not have an adverse effect on wildlife habitat because these projects will occur in predominantly developed areas. Therefore, the cumulative effects of the Valle Verde project related to the loss of open space and habitat are not considered to be cumulatively considerable and the project's contribution to cumulative impacts would be **less than significant.**

5.2.6 Mitigation Measures

The Valle Verde project would result in significant impacts to biological resources resulting from: impacts to oak woodland and coastal sage scrub habitat resulting from new development and long-term fuel management activities; disturbance or removal of native and specimen trees; impacts to wildlife resulting from increased noise and light on the project site; potential impacts to nesting birds; potential impacts to two sensitive reptile species; and potential impacts to two sensitive plant species. The implementation of the mitigation measures identified below would reduce the identified impacts of the Valle Verde project to a less than significant level.

BIO-1 Development of proposed structures and long-term fuel management activities would permanently remove or disturb 0.24 acre of oak woodland and 0.12 acre of coastal sage scrub habitat.

Proposed development would result in direct (i.e., habitat removal) impacts to 0.04 of an acre (1,534 square feet) of oak woodland habitat, and proposed fuel management activities would result in long-term impacts to 0.20 of an acre (8,817 square feet) of oak woodland. The proposed project would result in direct impacts to 0.01 of an acre (401 square feet) of coastal sage scrub habitat and fuel management activities would result in long-term impacts to 0.11 of an acre (5,007 square feet) of coastal sage scrub.

BIO-1a. Habitat Restoration Plan. Prior to issuance of grading or building permits, an oak woodland and coastal sage scrub restoration plan prepared by a qualified biologist shall be submitted for review and approval by the City's Environmental Analyst. At minimum, the restoration plan shall contain the following elements.

1. The plan shall include all recommendations related to restoration and tree replacement contained in the Biological Assessment and Tree Assessment and Protection Plan prepared for the project.

2. Removed/disturbed oak woodland and coastal sage scrub habitat shall be provided/restored at a minimum 2:1 replacement ratio. To the extent possible, this mitigation shall be performed on the project site in existing non-native and/or disturbed habitat such as areas where fuel management activities have occurred but will no longer be required, and nonnative annual grassland habitat. The habitat

restoration plan shall at a minimum create 0.48 of an acre of oak woodland and 0.24 of an acre of coastal sage scrub habitat. The oak woodland and coastal sage scrub habitat restoration/mitigation may be implemented in conjunction with proposed oak tree replacement mitigation (BIO-2a).

3. At minimum, the oak woodland and coastal sage scrub habitat restoration/mitigation plan shall describe the following plan elements:

    a. Restoration site selection criteria.
    b. Where restoration/mitigation will occur.
    c. The existing conditions in the restoration/mitigation area(s).
    d. Site preparation and planting methods.
    e. A planting pallet using locally obtained native coast live oak trees and coastal sage scrub plant materials.
    f. A maintenance schedule.
    g. Mitigation goals, objectives, and success criteria.
    h. A description of the monitoring methods and reporting that will be used to document and measure the progress of the restoration/mitigation effort.

4. The coastal sage scrub habitat restoration/mitigation performance standard shall be a minimum of 80 percent native herb and shrub cover. The oak woodland habitat restoration/mitigation performance standard shall be a minimum of 45 percent canopy cover for native trees. Both the coastal sage scrub and oak woodland areas shall have no more than 15 percent non-native weeds (excluding non-native annual grasses) and the required performance standards shall be achieved within five (5) years after initial planting.

5. Monitoring of the restoration areas shall occur for a minimum of five (5) years. Monitoring reports shall be submitted annually and at the completion of the five year period. If the final report indicates that the restoration project has in part or in whole been unsuccessful based on the performance standards specified in the restoration plan, the applicant shall submit within 90 days a revised or supplemental restoration program.

6. All plantings shall be maintained for the life of the project.

7. All cleared, graded, or disturbed areas on the project site shall be planted or protected and maintained for erosion control purposes as soon as feasible following initial disturbance.

8. All disturbed soil around the margins of the development proposed on the western side of the campus adjacent to the existing oak woodland shall be hydroseeded with a native coastal sage scrub seed mix using native species found in adjacent habitats. Seed shall be collected from locally-occurring plants (either on-site or within the south coast of Santa Barbara County).

9. Areas adjacent to the oak woodland on the western side of the property that are currently subject to fuel modification but would no longer require management after the approval of the proposed project (approximately 1.5 acres), shall be cleared of existing invasive, nonnative species (oleander, ice plant, ivy, etc.) and replanted with native, locally-occurring ground cover, brush and trees found in the oak woodland and coastal sage scrub habitats.

10. Planting shall be undertaken immediately after completion of construction.

11. Cages around the saplings shall be installed during planting to prevent wildlife from damaging the young trees. Weeds shall be controlled and a 2-3 inch layer of mulch shall be placed around the trees, but not against the stems. Newly planted saplings shall be irrigated with drip or other water source for the first two years, until the saplings are established.

12. All trees removed during construction shall have their trunks and large limbs cut into three to four-feet long sections and scattered around adjacent natural habitat to function as microhabitat for small animals.

Recommended Mitigation Measure. The following mitigation measure (13) is recommended to enhance the restoration of oak woodland habitat impacted by the proposed project by reducing the amount of time required to restore the habitat value of impacted areas. Implementation of this measure in a timely manner (i.e., prior to occupancy permit issuance), however, may require that the larger replacement trees not be grown from acorns collected from onsite oak trees, as required by proposed mitigation measure BIO-2a.1. Instead, larger replacement trees shall be locally obtained native coast live oak trees. Implementation of this recommended mitigation measure is not required to reduce impacts to oak woodland habitat to a less than significant level.

13. To restore oak woodland habitat functions as quickly as possible, it is recommended that at least 80 percent of the of native tree replacement (80 percent of 150 replacement trees = 120 trees) be performed using 15-gallon or 24-inch box trees at a 3:1 mitigation ratio; and that 20 percent of the native tree replacement be performed using one to five gallon trees planted at a 10:1 mitigation ratio (20 percent of 150 replacement trees = 30 trees).

BIO-2. Implementation of the proposed project would result in significant impacts to native and specimen trees resulting from the removal of 15 coast live oak trees and one (1) Monterey pine tree. The project would also significantly impact six (6) coast live oak trees, one (1) redwood, two (2) Monterey pine trees, and one (1) western sycamore by encroaching into more than 20 percent of the tree's critical root zone. In addition, the project would disturb and/or encroach minimally (less than 20 percent) into the critical root zone of 31 coast live oak trees.

BIO-2a. Native and Specimen Tree Replacement and Protection. The project applicant shall implement the Valle Verde Retirement Community Tree Assessment and

Protection Plan (Spiewak, 2008), and the mitigation measures provided by the Initial Study prepared for the Valle Verde project. The following tree replacement/protection measures shall be implemented.

1. A minimum oak tree replacement ratio of 10:1 shall be required to mitigate the loss of the 15 coast live oaks. A minimum survivorship ratio of 8:1 after three years post-planting shall be achieved. Acorns collected from on-site oak trees shall be used. One hundred fifty oak saplings, one gallon in size shall be planted in areas between the new structures on the west side of the property (project north) and the oak woodland. Additional trees shall be planted if damage occurs to existing trees during construction related activities. Mitigation trees and required protection/maintenance requirements shall be installed prior to issuance of project permits.

2. The following measures shall be noted on the grading plan submitted to the building department prior to issuance of grading permit and implemented prior and during construction-related activities to ensure the protection of trees:

    a. Tree protection fencing and barriers shall be installed as indicated on the fencing plan.

    b. Fences shall be chain link or orange plastic, four to six feet high and positioned at the Critical Root Zone (CRZ) as specified in the tree inventory table and illustrated on the site maps of the Tree Assessment and Protection Plan.

    c. CRZs shall have a radius measured from the center of the trunk to the outside edge of the CRZ, wherever possible. If work is approved within the CRZ, the fence shall be placed at the outside edge of the work zone.

    d. Fencing shall remain upright and intact throughout the duration of the project.

    e. Construction related activities shall be prohibited within the Tree Protection Zones (TPZ), including the use of heavy equipment, storage of materials, or accumulation of soil for later use.

    f. Demolition and excavation within TPZs of all native and non-native trees shall be done by hand where reasonable. Reasonableness shall be determined by the Project Environmental Coordinator, Supervising General Contractor and the Project Arborist.

    g. Special attention shall be given to construction related activity around sycamore No. 104 and all oak trees to minimize impacts. Three 24-inch boxed sycamores shall be planted to mitigate impacts to sycamore #104.

    h. Any roots encountered within the CRZs of trees, even if outside the TPZs shall be cleanly cut back to an undisturbed section of the root zone. In areas where roots are cut, the soil profile shall be irrigated to reduce drying of newly exposed soil

and subsequent damage to remaining roots in that profile. The Project Arborist shall determine the quantity, area and frequency of irrigation to the disturbed area.

i. A permethrin-based pesticide (Astro) shall be applied to the lower six feet of oak tree trunks stressed from root cutting in the early Spring and late Summer (through September), to reduce the risk of attack by fatal oak bark beetles. It may need to be repeated for several years at the discretion of the City Arborist.

j. Tree removal should, to the extent feasible, be scheduled between August 16 and January 31 to avoid the bird nesting season, or survey and construct only if nesting birds are absent (see mitigation measure BIO-3a.2).

k. All trees not indicated for removal on the site plan shall be preserved, protected, and maintained, in substantial accordance with the Tree Assessment and Protection Plan dated November 12, 2008.

l. All required mitigation trees, and each of the impacted but not significantly impacted trees shall be monitored once a year following the completion of construction activities for a period of five years. Should any of these trees die during the monitoring period, they shall be replaced at the specified tree replacement mitigation ratio.

Proposed mitigation measure AES-1 requires the replacement of skyline and specimen trees removed from the project site. No additional mitigation is required for impacts to large non-native trees located on the project site.

BIO-3 Project-related construction activities have the potential to impact active bird nests, and construction activities on the western portion of the project site have the potential to impact silvery legless lizards and coast horned lizards.

BIO-3a Sensitive Species Surveys and Monitoring. Prior to issuance of any grading or building permits, the applicant shall submit a draft contract with a qualified biologist for the review and approval of the Environmental Analyst. The following monitoring and survey activities shall be implemented:

1. A qualified biologist shall supervise the installation of the construction fencing around all work areas and access roads. Fencing shall be maintained through the duration of project construction.

2. Tree removal/relocation/trimming activities shall not occur during nesting season (February 1 – August 15). If these activities must occur during this time, a qualified biologist shall conduct a survey of the trees no more than one week prior to the activity to identify active nests and nest holes. The biologist shall map the location of all active and inactive nests and nest holes in trees. A 300-foot radius no-disturbance buffer shall be established around trees containing active nests and this buffer shall be maintained until the biologist has verified that young birds have fledged the nest.

3. A city approved biologist familiar with the habits of legless lizards and coast horned lizards shall monitor initial vegetation removal efforts (grubbing), grading and other surface-disturbing activities for silvery legless lizards and coast horned lizards. The biologist shall direct the equipment operator to slowly remove vegetation and the top 12 inches of topsoil while the biologist scans the soil for lizards. Any and all reptiles found shall be relocated to appropriate microhabitats in adjacent, undisturbed habitat out of harm's way. The monitoring biologist shall complete a California Natural Diversity Database Field Survey form should any sensitive reptiles be found and shall fax a copy to the City, and the California Department of Fish and Game California Natural Diversity Database per the instructions on the field survey form.

BIO-4. The proposed project has the potential to result in significant impacts to Santa Barbara honeysuckle and mesa horkelia, which are considered to be sensitive plant species.

BIO-4a. Sensitive Plan survey and Restoration Requirements. Prior to issuance of grading or building permits, a survey plan prepared by a qualified biologist shall be submitted for review and approval by the City's Environmental Analyst. The survey plan shall also describe restoration efforts that will be implemented if it is determined that the proposed project would result in significant impacts to Santa Barbara honeysuckle and/or mesa horkelia. At minimum, the plan shall contain the following elements.

1. Prior to the issuance of a grading permit, a botanical survey shall be performed to confirm the presence or absence of Santa Barbara honeysuckle and mesa horkelia on the western side of the project site.

2. The grading limits and the outer limits of the proposed fuel modification zone shall be staked by a licensed surveyor prior to performance of the botanical surveys. The surveys shall be performed by a qualified biologist/botanist and shall be performed within one month of any scheduled ground and/or vegetation disturbance.

3. Should the surveys required by mitigation measure BIO-4a.1 find any sensitive plants within the area where disturbance will occur, a mitigation plan shall be prepared by a qualified biologist/botanist. The mitigation plan shall describe what measures shall be used to avoid impacts to any sensitive plants found in the survey area. Should the removal of any sensitive plant be unavoidable, replacement shall be performed at a minimum 10:1 ratio for each plant that is removed. This sensitive plant replacement mitigation may be implemented in conjunction with the proposed oak woodland and coastal sage scrub habitat restoration/mitigation plan (BIO-2a).

4. At minimum, the habitat restoration/mitigation plan shall describe the plan elements:

    a. Restoration site selection criteria.
    b. Where restoration/mitigation will occur.
    c. The existing conditions in the restoration/mitigation area(s).
    d. Site preparation and planting methods.

e. A planting pallet using locally obtained plant materials.
f. A maintenance schedule.
g. Mitigation goals, objectives, and success criteria.
h. A description of the monitoring methods and reporting that will be used to document and measure the progress of the restoration/mitigation effort.

5. The sensitive plant mitigation performance standard shall be a minimum 80 percent survival of all mitigation plantings, with no more than 15 percent non-native weeds (excluding non-native annual grasses) to be achieved within 5 years after initial planting.

6. Monitoring of the restoration area shall occur for a minimum of five (5) years. Monitoring reports shall be submitted annually and at the completion of the five year period. If the final report indicates that the restoration project has in part or in whole been unsuccessful based on the performance standards specified in the restoration plan, the applicant shall submit within 90 days a revised or supplemental restoration program.